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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,430	10/31/2001	Roland M. Hochmuth	10017761-1	2418
L. Joy Griebenow - HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. BOX 272400			EXAMINER	
			YANG, RYAN R	
FORT COLLINS, CO 80527-2400			ART UNIT	PAPER NUMBER
			2628	
			MAIL DATE	DELIVERY MODE
			05/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/001,430	HOCHMUTH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ryan R. Yang	2628				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 3/3/2	<u>2008</u> .					
2a) This action is <b>FINAL</b> . 2b) This						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>19-25 and 34-39</u> is/are pending in the	application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>19-25,34-39</u> is/are rejected.	☑ Claim(s) <u>19-25,34-39</u> is/are rejected.					
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)	» 🗖	(770, 440)				
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)  Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		Patent Application (PTO-152)				

Application/Control Number: 10/001,430 Page 2

Art Unit: 2628

## **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/3/2008 has been entered.

- 1. This action is responsive to communications: Amendment, filed on 3/3/2008. This action is non-final.
- 2. Claims 19-25 and 34-39 are pending in this application. Claims 19 and 34 are independent claims. In the Amendment, filed 3/3/2008, claims 19, 20, 25, 34, 35 and 39 were amended.
- 3. The present title of the invention is "System and method for communicating graphics image data over a communication network" as filed originally.

## Claim Rejections - 35 USC § 103

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claims 19-25 and 34-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emerson et al. (US 6,664,969) and further in view of Grabowski (US 6,023,558).

As per claim 19, Emerson et al, hereinafter Emerson, discloses a method of transmitting graphics image data over a communication network, comprising:

comparing graphics image data of a new image for a destination device with graphics image data of a previous image for said destination device stored in a frame buffer of a graphics adapter remote from said particular destination device, said graphics adapter rendering said graphics image data for said new image and said previous image ("the processor 100 may periodically read the video graphics data from the frame buffer 114a in order to determine whether the data has changed. If the data has changed, the processor 100 will compress the video graphics data and transmit the data to the remote console C via one of the communications devices", column 6, line 16-21, where any region of a frame buffer is considered a region and the remote console C is a destination device in a internet connection (column 4, line 4) where a plurality of destination devices could be connected);

selecting blocks of graphics image data of new image that are different from corresponding blocks of graphics image data of previous image in a specified region of interest, wherein said region of region is a portion of said previous image ("Each block is periodically monitored for changes by calculating a hash code and storing the code in a hash code table. When the hash code changes, the block is transmitted to the remote console", Abstract, line 5-8; wherein the display area is a specific area of interest); and

formatting, by said graphics adapter, said selected blocks of graphics image data of said new image into a plurality of packets for transmission by a network interface of said graphics adapter over said communication network ("processing continues at step

554 where the transmit buffer is developed into a transmit packet and transmitted to the remote console C via the modern 112a or NIC 110", column 15, line 48-50).

Emerson discloses a method of transmitting image data. It is noted that Emerson does not explicitly disclose said region of interest is a portion of said previous image. However, this is known in the art as taught by Grabowski. Grabowski discloses a method of transmitting an image data wherein the region of interest is a portion of said previous image ("The changed region of the emulated frame buffer would than be transmitted at 210 over a network or other communication medium to the X server", column 1, line 62-64; also see column 1, line 45-65, where the object is a region of interest of an image).

Thus, it would have been obvious to incorporate the teaching of Grabowski into Emerson because Emerson discloses a method of transmitting an image and Grabowski discloses the region of interest is a portion of previous image for the purpose reducing processing time.

- 6. Regarding claim 20, Emerson discloses that transmitting plurality of packets to said destination device over said communication network (Figure 3, item 110 and 112A are communication networks).
- 7. Regarding claim 21, Emerson discloses that compressing said selected blocks of graphics image data prior to formatting selected blocks of graphics image data (Figure 6; "A pixel block 200 is first converted to a 6-bit color pixel block 208, as noted above.

  Then the 6-bit color pixel block 208 may be compressed by a compression function 210 and temporarily stored in a transmit buffer 212. At least at the end of each row, a

Application/Control Number: 10/001,430

Art Unit: 2628

transmit packet 214 is developed having a conventional header and footer as required by the particular network transport scheme", column 9, line 12-18).

Page 5

- 8. Regarding claims 22-23, Emerson discloses that adding identification information identifying selected blocks to plurality of packets and identification information comprises block numbers for selected blocks ("At least at the end of each row, a transmit packet 214 is developed having a conventional header and footer as required by the particular network transport scheme", column 9, line 15-18).
- 9. Regarding Claim 24, Emerson demonstrated all the elements as disclosed in the rejected claim 22, and further discloses an identification information comprises coordinate information for a plurality of corners of said selected blocks ("One example of marking surrounding pixels blocks is illustrated in FIG. 11B. A changed pixel block 200 was located at row 4, column 4", column 14, line 12-14).
- 10. Regarding claim 25, Emerson demonstrated all the elements as disclosed in the rejected claim 20, and further discloses waiting for a request for graphics image data from said destination device ("The remote console C communicates its ability to interpret the special commands before the remote management board 50 will send graphics data", column 10, line 14-17).
- 11. Regarding claims 34-39, Emerson and Grabowski disclose a graphics processing system (Emerson Figure 3; Grabowski Figure 4) with all the claims similar to claims 19-22 and 24-25 respectively, therefore are rejected as claims 19-22 and 24-25 respectively.

# Response to Arguments/Amendments

12. Applicant's arguments with respect to claims 19 and 34 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

## Inquiries

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan R. Yang whose telephone number is (571) 272-7666. The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ryan R Yang/ Primary Examiner, Art Unit 2628 May 30, 2008